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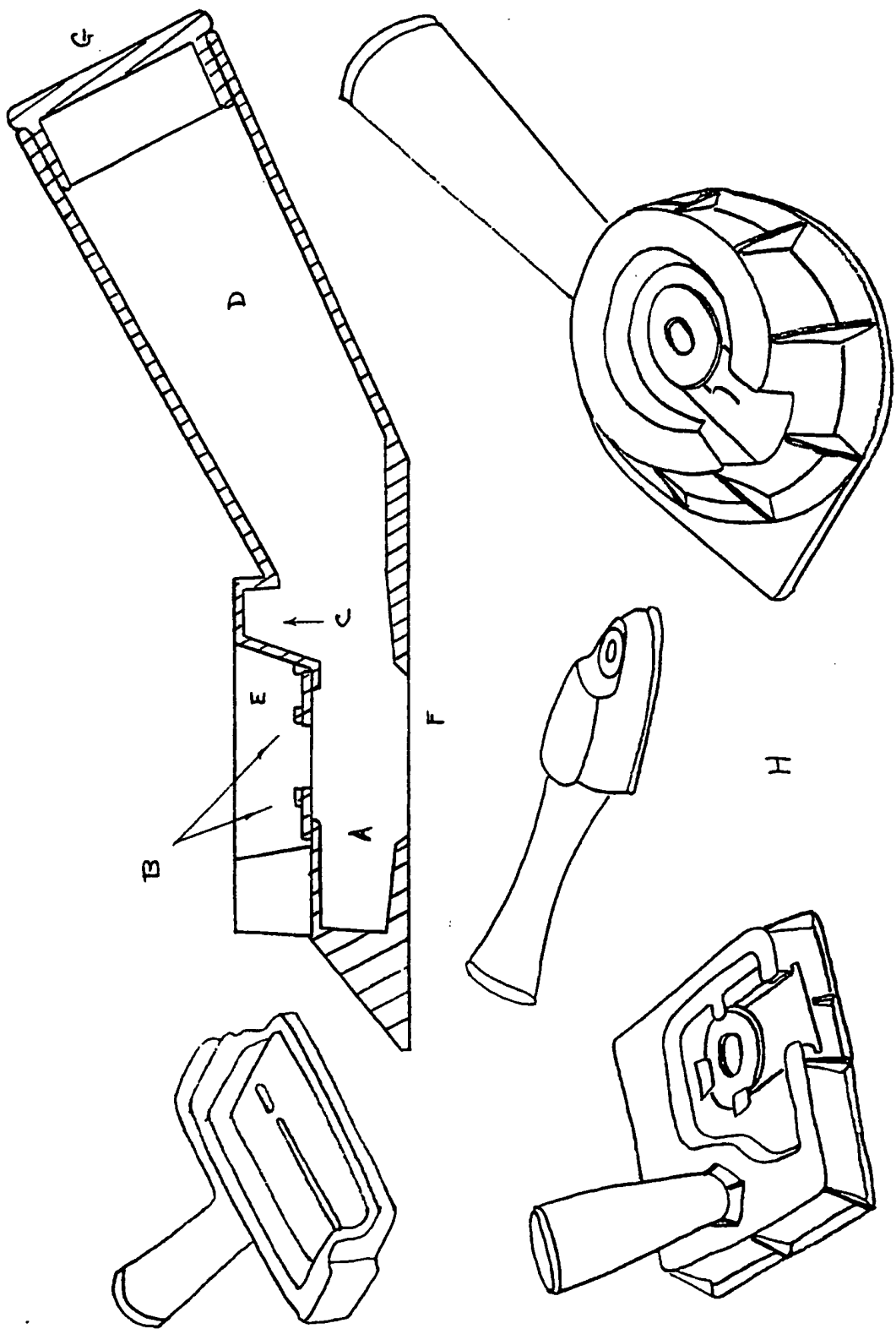
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Drill Mate

Attached drawing shows the device in section. "A" is an enclosure with two holes "E" & "F" on the same centreline.

"C" is a dished area (waste collection during ceiling drilling).

"D" is a hollow handle (waste container) with end cap "G"

"H" shows pictorial views of devices using the above.

DRILL-MATE

Accessory for cleaner working.

An invention to control and collect dust and waste products generated during cutting of various materials. The accessory serves also as a control on the depth of cut of a drill bit.

Drilling and cutting can be a dirty business. This is particularly true when plaster and brick are concerned. During installations the engineer or D.I.Y. person will often be working in a clean environment such as an office or in a home. Dust tends to float into the atmosphere and dirt falls to the floor. Inconvenience is caused with the necessary spreading out of dust sheets and time consumed in the tidying and clean-up afterwards.

When there is no depth stop fitted to an electric drill there are problems with certain jobs. If the materials to be cut are sandwiched into hard and soft materials cutting to a prescribed depth is difficult. If trunking or panelling is to be drilled then cutting can be difficult without breaking through and damaging equipment or cables in the duct or casing.

The invention is a device designed to surround the point at which the material is being cut. The dust is controlled and contained within the body of the device. The heavier debris falls into the handle.

Cutting into a wall (vertical surfaces) the waste falls into the handle.

Cutting into a ceiling the waste falls into the cup of the device.

Cutting into a floor (horizontal surfaces) waste is contained by the perimeter of the device.

For super-clean working a vacuum device hose can be attached at the end of the handle (by removal of an end cap). All dust is sucked away. The device will cling to smooth surfaces (vacuum pressure) for "hands free" operation.

The device doubles as a tool to limit the depth of drilling. By careful setting of the drill position in the drill chuck the drill is stopped at depth by the chuck coming into contact with the impact shield of the device.

DRILL-MATE

CLAIMS

1 A handtool to surround a point at which material is being cut. The waste products are contained within the device for disposal later or removed by vacuum. The device is also an aid to drill depth control.

2 A handtool as in claim 1 where the shape of the surround is circular.

3 A handtool as in claim 1 where the shape of the surround is rectangular

4 A handtool as in claim 1 where the shape of the surround is essentially triangular.

5 A handtool as in claim 1 where the shape of the surround is multisided.

6 A handtool as in claim 1 plus either of claims 2 - 5 where an area of the tool is reinforced to protect from drill chuck impact.

7 A handtool as in claim 1 plus claim 3 where the device has a slot or slots to accomodate a sawblade.

8 A handtool as in claim 1 plus any of claims 2 - 7 that has a storage zone.

9 A handtool as in claim 1 plus claim 8 that has a handle.

10 A handtool as in claim 1 plus claim 8 that has a hollow handle for a dust storage zone.

11 A handtool as in claim 1 plus claim 10 where the device has a vacuum outlet attachment.

12 A handtool as in claim 1 plus claim 8 where the device has a vacuum outlet and handle combined.

13 A handtool as in claim 1 plus either of claims 2 - 12 where the drill impact area protection shields are replacable.

14 A handtool as described herein with a cross-sectional construction approximately as shown in the drawing.

Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

-4-

Application number
GB 9406735.2

Relevant Technical Fields

(i) UK Cl (Ed.M) F4X (XA2B1)

(ii) Int Cl (Ed.5) B08B 15/04

Search Examiner
ALEXANDER G SMITH

Date of completion of Search
13 MAY 1994

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ONLINE DATABASE(S): WPI

Documents considered relevant following a search in respect of Claims :-
1-14

Categories of documents

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| X: Document indicating lack of novelty or of inventive step. | P: Document published on or after the declared priority date but before the filing date of the present application. |
| Y: Document indicating lack of inventive step if combined with one or more other documents of the same category. | E: Patent document published on or after, but with priority date earlier than, the filing date of the present application. |
| A: Document indicating technological background and/or state of the art. | &: Member of the same patent family; corresponding document. |

Category	Identity of document and relevant passages	Relevant to claim(s)
	None	

Databases:The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).